



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/063,456	04/24/2002	Peter J. Jenkins	BUR920010130	6574

7590 01/09/2006

Wood, Phillips, VanSanten, Clark & Mortimer
Suite 3800
500 W. Madison Street
Chicago, IL 60661-2511

EXAMINER

FERRIS, DERRICK W

ART UNIT	PAPER NUMBER
----------	--------------

2663

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/063,456

Applicant(s)

JENKINS ET AL.

Examiner

Derrick W. Ferris

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-23 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-10 is/are rejected.
- 7) ☒ Claim(s) 4-6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. **Claims 1-3 and 7-10** are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,724,772 B1 to *Borland et al.* (“*Borland*”).

As to **claim 1**, see e.g., figure 3 of *Borland*. In particular, a circular segmented bus is taught as bus 330, the cores are taught as modules 210 and an arbitrator means is taught as part of bus controller 350. Specifically, bus 330 is connected to each of the modules 210 (i.e., cores). Each of the cores is able to transfer data between themselves on the bus. Bus controller 350 performs a simple form of arbitration since the controller controls the action on the bus, see e.g., column 4, lines 13-26.

As to **claims 2 and 3**, bus 330 is both a data and an address bus, see e.g., column 4, lines 13-26.

As to **claim 7**, see e.g., figure 3 where the bus controller 350 (i.e., arbiter means) is operatively connected to each of the plurality of modules 210 (i.e., cores) and receives access requests from the cores. For example, each bus module may request a certain bandwidth.

As to **claim 8**, the bus controller 350 segments the circular bus by assigning e.g., time slots to particular modules 210, see e.g., column 5, lines 25-35.

As to **claim 9**, the maximum number of simultaneous transmissions is based on the number of time slots assigned.

As to **claim 10**, in reviewing the access requests the bus controller also looks at the priority, see e.g., column 6, lines 6-23.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-3 and 7-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,936,953 to *Simmons et al.* ("*Simmons*") in view of "Local and Metropolitan Area Networks" to *Stallings*.

As such to **claim 1**, *Simmons* discloses in e.g., figure 4 a bus as 22a-d, a core as master/slave terminals 11 and an arbitrator means as arbiter 40. Note that the bus in the

Art Unit: 2663

figure is connected to each of the terminals 11. Data is further transferred over the bus 22a-d, see e.g., column 1, lines 30-55. The arbiter 40 also arbitrates which of the plurality of cores can transmit at any given time, see e.g., column 1, lines 43-55.

Simmons may be silent or deficient to the further limitation of a circular segmented bus. In particular, figure 4 teaches a bus but does not explicitly teach that the bus is a ring bus, see e.g., column 2, lines 46-61 and column 4, lines 33-47. However, *Simmons* teaches that the arbiter 40 may be connected in a ring fashion, see e.g., column 4, lines 60-65.

Stallings teaches the further recited limitation above at e.g., figure 3.2 on page 75. In particular, *Stallings* teaches that it is well known in the art that a ring network is a closed-loop bus, see e.g., second paragraph on page 75.

The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Simmons* by clarifying that bus 22a-d is a ring bus.

As such, examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be to transmit information in a closed-loop. In particular, *Stallings* cures the above-cited deficiency by providing a motivation found at see e.g., second paragraph on page 75.

As to **claims 2 and 3**, see e.g., column 2, lines 46-61 of *Simmons* where MMIC bus 22 a-d is both an address and a data bus.

As to **claim 7**, see e.g., figure 4 of *Simmons* where the arbiter 40 is connected to each of the terminals using the request/grant lines.

As to **claims 8-9**, see e.g., column 3, lines 27-44 of *Simmons* with respect to splitting (e.g., segmenting) and simultaneous connections.

As to **claim 10**, with respect to preselect access priorities of the access request, see e.g., column 7, lines 51-65 of *Simmons* which teaches arbitration based on priority.

Allowable Subject Matter

5. **Claims 4-6** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. **Claims 11-23** are allowable.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

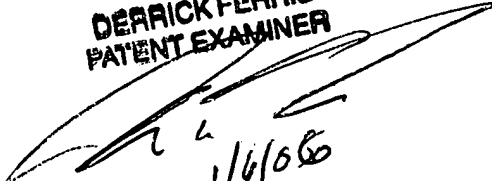
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2663

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Derrick W. Ferris
Examiner
Art Unit 2663

DWF 

DERRICK FERRIS
PATENT EXAMINER

1/6/06